

ABSTRACT

A wind power generation device capable of improving power generation efficiency is provided. The wind power generation device according to the present invention comprises: a substantially cylindrical duct 1 having a side wall with a substantially wing section; an impeller 2 rotatable around an axis of the duct 1; and a nacelle 5 that constitutes a streamlined pencil body 3 together with the impeller 2 and houses a generator 4 that uses torque of the impeller 2. The duct 1 has the side wall with the wing section so as to be able to produce a reduced pressure area at a rear of the duct and prevent generation of swirl at the rear of the duct 1. The pencil body 3 is provided so that a tip thereof is placed in the duct 1 and a rear end thereof protrudes from a rear end of the duct 1 so as to be close to a tip of the reduced pressure area produced at the rear of the duct 1. Blades 21 of the impeller 2 are provided in a maximum wind speed area 13 in the duct 1.